



## Mouse Anti-Human Toll-like Receptor 6 (TLR6)

| Cat. No. | Form                     | Quantity |
|----------|--------------------------|----------|
| 11020-01 | Purified (UNLB) Antibody | 0.1 mg   |

### DESCRIPTION

|                    |                                   |
|--------------------|-----------------------------------|
| <b>Clone</b>       | 3B6                               |
| <b>Isotype</b>     | Mouse IgG <sub>2a</sub> K         |
| <b>Specificity</b> | Human Toll-like Receptor 6 (TLR6) |

The Toll-like receptor (TLR) family is comprised of Type I transmembrane proteins characterized by an extracellular leucine-rich domain and a cytoplasmic tail that contains a conserved region call the Toll/IL-1 (TIR) domain. First discovered in *Drosophila*, TLRs recognize specific molecular patterns that are present in microbial components and respond to these components in order eliminate or limit invading microbes. To date, ten mammalian homologs of TLRs have been described. TLRs signal through adaptor molecules such as MyD88 leading to NF- $\kappa$ B activation, c-Jun N-terminal kinase activation (JNK), cytokine secretion and the inflammatory response. The amino acid sequence of human TLR6 is most similar to hTLR1 with 69% identity. TLR6 recognizes mycoplasmal macrophage-activating lipopeptide-2kD (MALP-2), soluble tuberculosis factor (STF), phenol-soluble modulins (PSM) and *B. burgdorferi* outer surface protein A lipoprotein (OspA-L) cooperatively with TLR2.<sup>1-6</sup>

### RESEARCH APPLICATIONS

- Enzyme-Linked-Immunosorbent-Assay (ELISA)

### CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested by ELISA to conform with the characteristics of a standard reference reagent.

### WORKING DILUTIONS

|                           |   |                   |
|---------------------------|---|-------------------|
| <b>ELISA</b>              | Purified (UNLB) antibody  | 1:3,000 – 1:5,000 |
| <b>Other Applications</b> | Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need. |                   |

### HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.1 mg purified immunoglobulin in 0.2 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- Reagents are stable for the period shown on the label if stored as directed.

### REFERENCES

1. Hajjar, A.M., D.S. O'Mahony, A. Ozinsky, D.M. Underhill, A. Aderem, S.J. Klebanoff, and C.B. Wilson. 2001. *J. Immunol.* 166:15.
2. Takeuchi, O., T. Kawai, P.F. Muhlradt, M. Morr, J.D. Radolf, A. Zychlinsky, K. Takeda, and S. Akira. 2001. *Int. Immunol.* 13:933.
3. Bulut, Y., E. Faure, L. Thomas, O. Equils, and M. Arditi. 2001. *J. Immunol.* 167:987.
4. Akira, S., and K. Takeda. 2004. *Nat. Rev. Immunol.* 4:499.
5. Takeuchi, O. T. Kawai, H. Sanjo, N.G. Copeland, D.J. Gilbert, N.A. Jenkins, K. Takeda, and S. Akira. 1999. *Gene* 231:59.
6. Muzio, M., G. Gioacchino, S. Sacconi, M. Laverro, and A. Mantovani. 1998. *J. Exp. Med.* 187:2097.

***For Research Use Only. Not for Diagnostic or Therapeutic Use.***